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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/805,761

03/22/2004

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SLA1564

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12/26/2006

EXAMINER

SHAN, APRIL YING

ART UNIT

PAPER NUMBER

2135

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/26/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/805,761	Applicant(s) RICHARDSON, TANNA MARIE	
	Examiner April Y. Shan	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/22/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-19 have been examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 9-13 and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Hutchison (U.S. Publication No. 2003/0145218).

As per **claims 1 and 10**, Hutchison discloses a method/system, comprising:

at a source, scanning a document ("In a digital copier, wherein hard-copy original images are scanned...." – e.g. abstract and fig. 1);

accepting a password ("...such as by entering passwords...." – e.g. paragraph [0024] and paragraph [0026]);

encrypting the scanned document ("original data is encrypted before being stored in the memory..." – e.g. abstract); and,

transmitting the encrypted document with the password (e.g. paragraph [0021] and [0025]), from the source to a network-connected printer ("...it is conceivable that the

present invention can be embodied in a combination of separate devices....network-controlled printer...” – e.g. paragraph [0014], paragraph [0029] and fig. 2).

As per **claims 2 and 11**, Hutchison discloses a method/system as applied above in claims 1 and 10. Hutchison further discloses comprising:

at the printer, accepting the encrypted document and password (paragraph [0021] and paragraph [0025]. Please note in paragraph [0021], the session key is itself encrypted and sent to the recipient.);

accepting an access code at a local interface (“...by entry of a suitable password or identification at UI 22” – e.g. paragraph [0027]);

comparing the access code to the password (“only a “correct” code would provide access to a private key” – e.g. paragraph [0027]);

in response to a matching the access code to the password, decrypting the document (e.g. paragraph [0025], [0027]); and,

printing the decrypted document (e.g.abstract).

As per **claims 3 and 12**, Hutchison discloses a method/system as applied above in claims 1 and 10. Hutchison further discloses wherein accepting a password includes accepting a password selected from the group including a PIN number, an alphanumeric code, biometric data, Smart card, magnetic stripe card, and proximity badge (paragraph [0024]).

As per **claims 4 and 13**, Hutchison discloses a method/system as applied above in claims 2 and 11. Hutchison further discloses wherein encrypting the document includes: at the source, deriving an encryption key from the password (e.g. paragraph [0022], [0025] and [0026]); and,

using the encryption key to encrypt the document (e.g. paragraph [0022], [0025] and [0026]).

As per **claim 18**, Hutchison disclose a system as applied above in claim 11. Hutchison further discloses wherein the printer user interface accepts an access code selected from the group including a PIN number, an alphanumeric code, biometric data, Smart card, magnetic stripe card, and proximity badge (e.g. paragraph [0027]).

As per **claims 9 and 19**, Hutchison discloses a method/system for recovering scan to confidential print communications, the method comprising:

at a network-connected printer interface (“...it is conceivable that the present invention can be embodied in a combination of separate devices....network-controlled printer...” – e.g. paragraph [0014], paragraph [0029] and fig. 1, 2), accepting an encrypted document and password (paragraph [0021] and paragraph [0025]. Please note in paragraph [0021], the session key is itself encrypted and sent to the recipient);

accepting an access code at a local interface (“...by entry of a suitable password or identification at UI 22” – e.g. paragraph [0027]);

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comparing the access code to the password ("only a "correct" code would provide access to a private key" – e.g. paragraph [0027]);

in response to a matching the access code to the password, decrypting the document (e.g. paragraph [0025], [0027]); and,

printing the decrypted document (e.g. abstract).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 5, 7-8, 14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison.

As per **claims 5 and 14** Hutchison discloses a method/system as applied above in claims 4 and 13. Hutchison further discloses comprising: encrypting the password

(e.g. paragraph [0025]); and, wherein transmitting the encrypted document to a network-connected printer, with the password, includes transmitting the encrypted document with the encrypted password (e.g. paragraph [0021]).

Hutchison does not disclose expressly hashing the password and wherein transmitting the encrypted document to a network-connected printer, with the password, includes transmitting the encrypted document with the hashed password.

However, Hutchison discloses using Pretty Good Privacy (PGP) as the basic encryption technique (e.g. paragraph [0025]). It is well known in the art at the time of the invention that PGP uses MD5 as a one-way hash function. Additionally, Hutchison discloses in paragraph [0025], "using PGP, the original data is compressed according to any one of known techniques,...this is a typical step in digital copying anyway".

At the time of the invention it would have been obvious to a person of ordinary skill in the art to replace the encrypted password with the hashed password or to incorporate a hashed password in the Hutchison's method/system and transmit the encrypted document to a network-connected printer, with the password, includes transmitting the encrypted document with the hashed password.

The motivation of doing so would have been "compression is a typical step in digital copying anyway...not only reduces of amount data that must be encrypted, but also would confound many straightforward cryptological attack techniques", as taught by Hutchison (paragraph [0025]) and "protecting such data within a copier, or more broadly, within any system in which image data is scanned and retained for subsequent printing", as taught by Hutchison (paragraph [0003])

As per **claims 7 and 16**, Hutchison discloses a method/system as applied above in claims 5 and 14. Hutchison further discloses comprising: at the printer, entering the access code (paragraph [0027]; and, wherein comparing the access code to the password includes comparing the password to the access code (paragraph [0027]).

Hutchison does not disclose expressly hashing the access code and wherein comparing the access code to the password includes comparing the hash password to the hashed access code.

However, Hutchison discloses using Pretty Good Privacy (PGP) as the basic encryption technique (e.g. paragraph [0025]). It is well known in the art at the time of the invention that PGP uses MD5 as a one-way hash function. Additionally, Hutchison discloses in paragraph [0025], "using PGP, the original data is compressed according to any one of known techniques,...this is a typical step in digital copying anyway".

At the time of the invention it would have been obvious to a person of ordinary skill in the art to incorporate a hashed access code in the Hutchison's method/system and compare the access code to the password includes comparing the hash password to the hashed access code.

The motivation of doing so would have been "compression is a typical step in digital copying anyway...not only reduces of amount data that must be encrypted, but also would confound many straightforward cryptological attack techniques", as taught by Hutchison (paragraph [0025]) and "protecting such data within a copier, or more

broadly, within any system in which image data is scanned and retained for subsequent printing", as taught by Hutchison (paragraph [0003])

As per **claims 8 and 17**, Hutchison discloses a method/system as applied above in claims 7 and 16. Hutchison further discloses wherein decrypting the document includes:

regenerating the encryption key from the access code (paragraph [0027]); and,
using the encryption key to decrypt the encrypted document (paragraph [0027]).

7. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison as applied to claims 1-5, 7-14 and 16-19 above, and further in view of McGraw (U.S. Patent No. 6,542,261).

As per **claims 6 and 15**, Hutchison discloses a method/system as applied above in claims 5 and 14. Hutchison further discloses wherein transmitting the encrypted document with the hashed password includes transmitting a file including: the hashed password (see above rejections in claims 5 and 14) and encrypted document data (e.g. abstract).

Hutchison does not disclose express wherein transmitting the encrypted document with the hashed password includes transmitting a file including:

an unencrypted header with an identification of the scanned document.

McGraw discloses wherein transmitting the encrypted document with the hashed password includes transmitting a file including: an unencrypted header with an identification of the scanned document (e.g. fig. 4, abstract and col. 3, lines 6-11).

Hutchison and McGraw are analogous art because they are from the same field of endeavor of digital copier. At the time of the invention it would have been obvious to a person of ordinary skill in the art to incorporate McGraw's unencrypted header to Hutchison's method/system.

The motivation for doing so would have been since "a hotel's business center would need to know which guest the secure FAX should be delivered to", as taught by McGraw (col. 3, lines 10-1).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. However, applicants are **strongly urged** to consider the cited references carefully and distinguish them from the instant claims in accordance with 37CFR 1.111c when presenting an amendment in response to the current office action so that the instant application can be expeditiously prosecuted.

- Rabb (U.S. Pub. No. 2005/0262340) discloses methods/systems for scanning and encrypting documents are disclosed.
- Yoda (U.S. Pub. No. 2004/0165723) discloses an image processing apparatus, system, method which are high in secrecy nature in transmission of image information are provided.

- Chan et al. (U.S. Patent No. 6,378,070) discloses in a distributed computing environment, a user is able to send a document to a secure printer in such a way that only a specified intended recipient can print the document.
- Jandel et al. (U.S. Patent No. 6,931,534) discloses a method and a device for partial encryption and progressive transmission of images.
- Slick et al. (U.S. Patent No. 7,111,322) discloses a device that is connected to a network and which performs secure operations using an existing encryption keypair within the device.

Contact Information

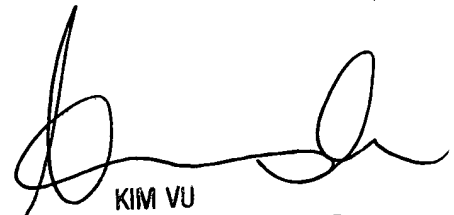
Any inquiry concerning this communication or earlier communications from the examiner should be directed to April Y. Shan whose telephone number is (571) 270-1014. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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12 December 2006
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